

### **REMARKS**

Claims 1-6 are pending in this application.

Claim 1 has been amended and new claim 7 has been added. Amended claim 1 and new claim 7 do not introduce any new subject matter.

### **REJECTIONS UNDER 35 U.S.C. § 102:**

Reconsideration is respectfully requested of the rejections of claims 1-6 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,309,978 B1 to Donohoe et al. ("Donohoe").

Applicants respectfully submit that Donohoe does not disclose or suggest "a first impedance matching circuit to impedance-match a main voltage and a second impedance matching circuit to impedance-match a bias voltage", as recited in claim 1. Therefore, Applicants respectfully submit that claim 1 is not anticipated by Donohoe. In addition, for at least the reason that claims 2-6 depend from claim 1, claims 2-6 are also not anticipated by the cited reference.

Claim 1 recites a first and a second impedance matching circuits connected to a mixer to impedance-match a main voltage and a bias voltage, respectively. In contrast, Donohoe discloses three frequency/power generators (31, 32, 33) which are directly connected to a mixer (37). See, e.g., Fig. 6. Thus, Donohoe does not disclose the impedance matching circuits.

The Examiner states on page 2 of the Office Action that "filters may be employed for blocking out unwanted frequencies". However, the filters in Donohoe do not function as impedance matching circuits. Unlike the filters in Donohoe, the claimed impedance

matching circuits prevent AC power supplied from the main and bias power sources from being reversed at the mixer.

Therefore, Applicants respectfully request that Examiner withdraw the rejection of claims 1-6 under 35 U.S.C. § 102(b) and that claims 1-6 are in condition for allowance.

Reconsideration is respectfully requested of the rejections of claims 1, 3 and 5 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Pub. No. US2003/0094239 to Quon et al. ("Quon").

Applicants respectfully submit that Quon does not disclose or suggest "a lower electrode and an upper electrode", as recited in claim 1. Therefore, Applicants respectfully submit that claim 1 is not anticipated by Quon. In addition, for at least the reason that claims 3 and 5 depend from claim 1, claims 3-5 are also not anticipated by the cited reference.

Claim 1 recites a plasma chamber comprising a lower electrode and an upper electrode. In contrast, Quon discloses a chuck only and does not show any components corresponding to an upper electrode. See, e.g., Fig. 3A. Further, the Examiner makes no indication of which parts of Quon would correspond to lower and upper electrodes.

Since Quon does not disclose or suggest the limitations recited in independent claim 1, Applicants respectfully submit that independent claim 1 is not anticipated by Quon. Claims 3 and 5 depend from claim 1 which, for the reasons stated hereinabove, is submitted not to be anticipated by the cited reference. For at least those very same reasons, claims 3 and 5 are also be submitted not to be anticipated by the cited reference.

Therefore, Applicants respectfully request that Examiner withdraw the rejection of claims 1, 3 and 5 under 35 U.S.C. § 102(e) and that claims 1, 3 and 5 are in condition for allowance.

Reconsideration is respectfully requested of the rejections of claims 1, 3 and 5 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,642,149 to Suemasa et al. ("Suemasa").

Applicants respectfully submit that Suemasa does not disclose or suggest "a mixer which receives and mixes a main voltage and a bias voltage, and outputs a mixed voltage to one of a lower electrode and an upper electrode", as recited in claim 1. Therefore, Applicants respectfully submit that claim 1 is not anticipated by Suemasa. In addition, for at least the reason that claims 3 and 5 depend from claim 1, claims 3-5 are also not anticipated by the cited reference.

Claim 1 recites a mixer receiving and mixing a main voltage and a bias voltage. The filters (118, 124) in Suemasa do not mix a first frequency power and a second frequency power. Instead, the first high frequency power and the second high frequency power are superimposed and coupled to a lower electrode. See, e.g., Col. 3 line 57- Col. 4 line 17.

Since Suemasa does not disclose or suggest the limitations recited in independent claim 1, Applicants respectfully submit that independent claim 1 is not anticipated by Suemasa. Claims 3 and 5 depend from claim 1 which, for the reasons stated hereinabove, is submitted not to be anticipated by the cited reference. For at least those very same reasons, claims 3 and 5 are also be submitted not to be anticipated by the cited reference.

Therefore, Applicants respectfully request that Examiner withdraw the rejection of claims 1, 3 and 5 under 35 U.S.C. § 102(e) and that claims 1, 3 and 5 are in condition for allowance.

**REJECTIONS UNDER 35 U.S.C. § 103:**

Reconsideration is respectfully requested of the rejections of claims 2, 4 and 6 under 35 U.S.C. § 103(a) as being unpatentable over Quon in view of Donohoe.

Reconsideration is also respectfully requested of the rejections of claims 2, 4 and 6 under 35 U.S.C. § 103(a) as being unpatentable over Suemasa in view of Donohoe.

In view of the previous arguments pertaining to the allowability of claim 1, Applicants respectfully submit that the Examiner has failed to show *prima facie* obviousness of claim 1 and that claim 1 is patentable over the cited references.

Claims 2, 4 and 6 depend upon claim 1. These dependent claims are believed to be patentable over Quon in view of Donohoe for at least the reason of their dependency on allowable independent claim 1. As such, Applicants respectfully submit that claims 2, 4 and 6 are patentable over Quon in view of Donohoe.

Further, claims 2, 4 and 6 are believed to be patentable over Suemasa in view of Donohoe for at least the reason of their dependency on allowable independent claim 1. As such, Applicants respectfully submit that claims 2, 4 and 6 are patentable over Suemasa in view of Donohoe.

Therefore, based on the foregoing, Applicants respectfully request that the Examiner withdraw the rejections of claims 2, 4 and 6 under 35 U.S.C. § 103(a) and that claims 2, 4 and 6 are in condition for allowance.

**New claim 7**

New claim 7 is submitted to be patentable over the cited references for at least the reason that none of the cited references, when taken alone or in combination, disclose a mixer that “a mixer which prevents a main power source and a bias power source from being directly connected to a lower electrode for simultaneously supplying AC power from the main and bias power sources to the lower electrode”, as recited in new claim 7.

An early and favorable reconsideration is earnestly solicited. If the Examiner has any further questions or comments, the Examiner may telephone Applicants’ Attorney to reach a prompt disposition of this application.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Michael F. Morano", written over a horizontal line.

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